

Progress Report 4
December 4, 2009 through January 1, 2010
for
West Riser Tide Gate Sediment Removal Action
Wood-Ridge and Carlstadt, New Jersey

(USEPA No. NJD980529879)

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Section 1 – Introduction

This progress report for the West Riser Tide Gate Sediment Removal Action located in the Boroughs of Wood-Ridge and Carlstadt, New Jersey summarizes the status of remedial actions being performed as described in the West Riser Sediment Removal Action Work Plan (SRAWP), approved by the United States Environmental Protection Agency (USEPA) on September 9, 2009. The progress report covers the period from December 4, 2009 and January 1, 2010. The progress report is being submitted pursuant to the Administrative Consent Order (ACO) between Morton International, Inc. and the USEPA as well as the monthly progress reporting requirements of the SRAWP. This report has been prepared in a similar format as that used for the remedial action underway at the adjacent Ventron/Velsicol site.

The components of the remedial action presented in the SRAWP are as follows:

- Cofferdam construction
- By-pass pumping system installation and operation
- Monitoring
- Sediment removal
- Cofferdam removal
- By-pass pumping system breakdown; and
- Site restoration

The progress report is organized as follows:

- Section 1 – Introduction;
- Section 2 – Remedial Actions Summary;
- Section 3 – Permitting Application Status; and
- Section 4 – Sampling Results and Waste Generated

Section 2 – Remedial Actions Summary

2.1 Remedial Actions Status

This section summarizes the status of remedial actions at the Site for the reporting period. **Table 1**, attached, provides a summary of remedial actions and the status of each. Remedial actions performed during this period include:

- Related Site Activities
 - Sediment Disposal
 - Additional analysis of the stockpiled sediments was performed to meet the requirements of the selected disposal facility.
 - Excavated sediment was taken off-site to a disposal facility.
 - Initiated work on Remedial Action Report

2.2 Deviations and Modifications

No deviations from or modifications to the SRAWP occurred during this reporting period.

2.3 Remedial Actions to be Performed Next Period

The following remedial actions are scheduled to be performed during the next reporting period (January 2, 2009 to February 1, 2010):

- Related Site Activities
 - Sediment Disposal
 - The disposal of hazardous and non-hazardous sediments will be completed
 - Continue work on Remedial Action Report

2.4 Schedule of Remedial Activities

The schedule of West Riser SRAWP remedial activities at the Site is provided in **Attachment 1**.

2.5 Problems or Delays

There were no problems or delays this period.

Section 3 – Permit Application Status

The permit application status for the project is presented in **Table 2**. No permit applications were submitted in this progress report period.

Section 4 – Sampling Results and Waste Generated

4.1 Sampling Results

This section summarizes sampling results obtained during the reporting period. Sampling was performed for the waste characterization of the excavated sediment. The results of fifteen previous waste classification samples, from Phase I testing, were presented in Progress Reports 2 and 3. Two additional phases of waste characterization testing were performed during this period. Phase II testing was performed to increase the sample collection frequency to 1 sample for every 250 cubic yards. Phase II sampling units were arranged perpendicular to units used in Phase I sampling. This was done to ensure that two representative samples were taken from each 500 cubic yard unit. Eight additional samples were collected on December 11, 2009 from four composite locations inside each Phase II unit. Grab samples were taken approximately one foot below the surface of the stockpile and homogenized by hand prior to placing the material in sample containers. Sampling for volatile organic compounds (VOCs) was performed separately. Analysis of VOCs was performed on discrete samples taken at one of the four locations used for composite sampling in each unit. Samples were taken from approximately one foot below the stockpile surface and were placed directly in sample containers. Samples from Phase II testing were sent to Test America in Pittsburgh, PA for analysis. Samples were analyzed for:

- Metals by method SW846 6010B (except for Mercury by method SW846 7470A);
- Total mercury by method SW846 7470A;
- Pesticides by method SW846 8081A;
- PCBs by method SW846 8082;
- Herbicides by method SW846 8151A;
- VOCs by method SW846 8260B;
- SVOCs by method SW846 8270C;
- pH by method SW846 9045C;
- Ignitability by method SW846 Section 7;
- Total Sulfide and Total Cyanide (Method SW-846 has been modified to report total sulfide and cyanide rather than reactive);
- RCRA TCLP compounds as well as TCLP copper, nickel, mercury, and zinc by the previously mentioned metal analysis methods;
- Free Liquid by method SW846 9095;
- Chemical Oxygen Demand by method MCAWW 410.4, Oils and Grease by method CFR136A 1664A HEM, and Ammonia-Nitrogen by method MCAWW350.1;
- Total Solids by method SM20 2540B; and
- Total Volatile Solids by method SM20 2540G.

Phase II samples are summarized in **Table 3**. Complete sampling results are available upon request.

The purpose of Phase III waste characterization sampling was to further delineate the soil in two stockpiles from Phase II sampling, represented by samples 20091211SP-011V0-1UN and 20091211SP-15V0-1UN, which had TCLP mercury concentrations equal to or greater than the RCRA limit of 0.2 mg/l. The TCLP mercury analysis sample results were significantly higher than previous samples. Eight additional samples were collected on December 23, 2009 as part of Phase III testing. The two soil stockpiles of interest were both segmented into four smaller units, and a sample was collected from each. Samples from Phase III testing were sent to Test America in Pittsburgh, PA for analysis. Samples were analyzed for the total mercury and TCLP mercury only. A summary of the results of Phase III testing is presented in **Table 4**. Complete sampling results are available upon request.

The analysis of Phase III samples indicated that two of the 8 (total) smaller units contained TCLP mercury concentrations greater than the RCRA limit. Based on this testing, these two units, represented by 20091223SP-019V0-1UN and 20091223SP-022V0-1UN totaling approximately 125 cubic yards, were determined to be hazardous waste. An alternate disposal facility is currently being sought for this waste.

4.2 Waste Generated

Non-hazardous excavated sediments were removed from the Site by truck and sent to the Greentree Landfill operated by Veolia Environmental Services in Kersey, PA for disposal. A table summarizing waste sent off-site is included as **Table 5**.

Tables

Table 1 - Remedial Actions between December 4, 2009 and January 1, 2010
West Riser Tide Gate Sediment Removal Action
Wood-Ridge and Carlstadt, New Jersey

Remedial Action	Description	Scheduled this Period?	Status	Comments
Cofferdam Construction	Increase Height of Downstream Cofferdam by 6"	No	Completed in a previous period	The 6-inch extension of the downstream cofferdam was completed this period.
	Cofferdam Removal	No	Completed in a previous period	The upstream and downstream cofferdam were removed.
Installation of by-pass pumping systems	Pump installation	No	Completed in a previous period	Installation of four 12 inch pumps and two 24-inch diameter pumps was completed.
Operation of by-pass pumping systems	Operation of pump system to by-pass space between cofferdams	No	Completed in a previous period	The by-pass system was in operation this period.
Removal of by-pass pumping systems	Removal of pump system	No	Completed in a previous period	The by-pass system was removed upon the completion of backfilling
Sediment removal and Backfilling	Sediment Excavation	No	Completed in a previous period	Excavation of all zones was completed this period.
	Backfilling excavated zones	No	Completed in a previous period	Backfilling of all zones was completed this period
Site Restoration	Site Restoration	No	Completed in a previous period	Topsoil and seed were placed, and erosion controls were implemented.
Related Site Activities	Sediment Disposal	Yes	Ongoing	Additional analysis of the stockpiled sediments was performed to meet the requirements of the selected disposal facility. Excavated sediment was taken off-site to a waste facility for disposal.
	Decontamination and Demobilization	Yes	Ongoing	Site equipment was decontaminated for sediment contaminants and taken off-site. A limited amount of equipment will remain onsite for sediment load out.

Table 2 - Permit Application Status as of January 1, 2009
 West Riser Tide Gate Sediment Removal Action
 Wood-Ridge and Carlstadt, New Jersey

Permit Title	Permit Number	Reviewing Agency	Agency Contact	Date Submitted	Approval Date	Expiration Date	Comments
Freshwater Wetlands Permit	FWW 090001	LURP/ Dredging Office	Gary Nickerson	6/15/2009	NA	NA	Awaiting approval
Waterfront Development Permit	CDT 090001	LURP/ Dredging Office	Gary Nickerson	6/15/2009	NA	NA	Awaiting approval
Flood Hazard Area Permit	CDT 090002	LURP/ Dredging Office	Gary Nickerson	6/15/2009	NA	NA	Awaiting approval
FAA Permit	630996-109614384	FAA	Robert Alexander	4/29/2009	6/5/2009	12/5/2010	
Tidelands Instrument	0200-05-0002.3	Bureau of Tidelands Management	Bill Kresnosky	7/23/2009	NA	NA	Awaiting approval
Soil and Erosion Control Permit	09-B10212	Bergen County Soil	Angelo Caruso	7/15/2009	9/29/2009	NA	
Soil and Erosion Control Permit Rev. 1	09-B10212	Bergen County Soil	Angelo Caruso	11/25/2009	NA	NA	Awaiting approval

Table 3 - Phase II Waste Characterization Results
West Riser Tide Gate Sediment Removal Action
Wood-Ridge and Carlstadt, New Jersey

Compound	RCRA Limit	Units	20091211SP-011V0-1UN		20091211SP-012V0-1UN		20091211SP-013V0-1UN		20091211SP-014V0-1UN		20091211SP-015V0-1UN		20091211SP-016V0-1UN		20091211SP-017V0-1UN		20091211SP-018V0-1UN	
			Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit
Metals																		
Silver	3	mg/L	0.0016	B	0.05	0.0024	B	0.05	0.0014	B	0.05	0.00093	B	0.05	0.0034	B	0.05	0.00094
Arsenic	5	mg/L	0.011	B	0.05	0.019	B	0.05	0.013	B	0.05	0.017	B	0.05	0.006	B	0.05	0.016
Barium	100	mg/L	0.63	B	0.2	0.94	B	0.2	0.8	B	0.2	0.83	B	0.2	0.89	B	0.2	0.88
Cadmium	1	mg/L	0.22	B	0.05	0.12	B	0.05	0.13	B	0.05	0.21	B	0.05	0.09	B	0.05	0.1
Chromium	5	mg/L	0.11	B	0.05	0.099	B	0.05	0.071	B	0.05	0.12	B	0.05	0.024	B	0.05	0.0046
Copper	187	mg/L	0.1	B	0.025	0.027	B	0.025	0.04	B	0.025	0.048	B	0.025	0.036	B	0.025	0.0093
Nickel	242	mg/L	0.11	B	0.04	0.11	B	0.04	0.089	B	0.04	0.11	B	0.04	0.084	B	0.04	0.1
Lead	5	mg/L	0.1	B	0.05	0.12	B	0.05	0.076	B	0.05	0.074	B	0.05	0.015	B	0.05	0.073
Selenium	1	mg/L	0.01	B	0.05	0.011	B	0.05	0.0082	B	0.05	0.0076	B	0.05	0.0069	B	0.05	0.0071
Zinc	1875	mg/L	4.7	B	0.02	3.2	B	0.02	3.5	B	0.02	4.1	B	0.02	2.2	B	0.02	4.0
Mercury (TCLP)	0.2	mg/L	0.52/0.27	B	0.02	0.024	B	0.001	0.011	B	0.0004	0.039	B	0.002	0.20/0.20	B	0.02	0.019
Mercury (Total)		mg/kg	159		11.1	134		4.4	152		4.7	79.7		4.4	730		43.8	359
Pesticides																		
Methoxychlor	10	mg/L	ND		0.001	ND		0.001	ND		0.001	ND		0.001	ND		0.001	ND
Chlordane	0.03	mg/L	ND		0.005	ND		0.005	ND		0.005	ND		0.005	ND		0.005	ND
Endrin	0.02	mg/L	ND		0.0005	ND		0.0005	ND		0.0005	ND		0.0005	ND		0.0005	ND
Heptachlor	0.008	mg/L	ND		0.0005	ND		0.0005	ND		0.0005	ND		0.0005	ND		0.0005	ND
Heptachlor Epoxide	0.008	mg/L	ND		0.0005	ND		0.0005	ND		0.0005	ND		0.0005	ND		0.0005	ND
Toxaphene	0.5	mg/L	ND		0.02	ND		0.02	ND		0.02	ND		0.02	ND		0.02	ND
Lindane	0.4	mg/L	ND		0.0005	ND		0.0005	ND		0.0005	ND		0.0005	ND		0.0005	ND
PCBs																		
Aroclor 1016	50	mg/kg	ND		0.44	ND		0.45	ND		0.47	ND		0.45	ND		0.46	ND
Aroclor 1221	50	mg/kg	ND		0.44	ND		0.45	ND		0.47	ND		0.45	ND		0.46	ND
Aroclor 1232	50	mg/kg	ND		0.44	ND		0.45	ND		0.47	ND		0.45	ND		0.46	ND
Aroclor 1242	50	mg/kg	ND		0.44	ND		0.45	ND		0.47	ND		0.45	ND		0.46	ND
Aroclor 1248	50	mg/kg	1.8		0.44	1.7		0.45	1.9		0.47	1.6		0.45	1.3		0.41	0.65
Aroclor 1254	50	mg/kg	1.3		0.44	0.55		0.45	1.1		0.47	0.83		0.45	0.46		0.41	0.3
Aroclor 1260	50	mg/kg	ND		0.44	ND		0.46	ND		0.47	ND		0.45	ND		0.41	ND
Herbicides																		
2,4-D	10	mg/L	ND		0.04	ND		0.04	ND		0.04	ND		0.04	ND		0.04	ND
2,4,5-TP (Silvex)	1	mg/L	ND		0.01	ND		0.01	ND		0.01	ND		0.01	ND		0.01	ND
VOCs																		
Vinyl chloride	0.2	mg/L	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND
2-Butanone	250	mg/L	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND
Benzene	0.5	mg/L	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND
Carbon tetrachloride	0.5	mg/L	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND
Chlorobenzene	100	mg/L	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND
Chloroform	8	mg/L	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND
1,2-Dichloroethane	0.5	mg/L	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND
1,1,1-Trichloroethane	0.7	mg/L	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND
Tetrachloroethane	0.7	mg/L	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND
Trichloroethane	0.5	mg/L	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND		0.2	ND
SVOCs																		
Pyridine	5	mg/L	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND
Cresols (total)	200	mg/L	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND
1,4-Dichlorobenzene	7.5	mg/L	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND
2,4-Dinitrobenzene	0.13	mg/L	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND
Hexachlorobenzene	0.13	mg/L	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND
Hexachlorobutadiene	0.5	mg/L	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND
Hexachlorocyclopentadiene	3	mg/L	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND
Nitrobenzene	2	mg/L	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND
Pentachlorophenol	100	mg/L	0.0046	J	0.25	ND		0.25	ND		0.25	ND		0.25	ND		0.25	ND
2,4,5-Trichlorophenol	400	mg/L	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND
2,4,6-Trichlorophenol	2	mg/L	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND		0.05	ND
Inorganics																		
Cyanide, total	100	mg/kg	1.5		0.67	1.8		0.68	1.4		0.7	7.4		0.88	3.4		0.62	1.1
Chemical Oxygen Demand		mg/L	36.7		10	75.6		10.0	56.0		10.0	78.8		10.0	102		10.0	73.0
N-Hexane Extractable Material	86550	mg/L	ND		4.8	ND		4.8	ND		4.8	ND		4.8	ND		4.8	ND
n-Hexane Extractable Material		mg/kg	863		224	630		228	619		235	1280		227	1190		207	230
Ignitability	No	none	NO		NO	NO		NO	NO		NO	NO		NO	NO		NO	NO
Nitrogen, Ammonia		mg/L	1.1		0.1	0.81		0.1	1.0		0.1	0.85		0.1	2.2		0.1	1.2
Soil and Waste pH	2.0-12.5		10.4		11.2	10.7		10.7	8.5		12.0	7.5		12.1	11.9		11.9	11.9
Paint Filter Test	CNF		CNF		CNF	CNF		CNF	CNF		CNF	CNF		CNF	CNF		CNF	CNF
Total Residue as Percent Solids		%	74.5		73.0	74.5		71.1	73.4		73.4	74.5		72.4	74.5		70.9	71.0
Total Residue		mg/L	330		10.0	272		10.0	340		10.0	480		10.0	697		10.0	610
Percent Volatile Solids		%	4.8		0.5	4.4		0.5	5.0		0.5	2.9		0.5	3.3		0.5	4.4
Sulfides, Total	500	mg/kg	36.6		40.3	54.8		41.1	90.1		42.2	65.4		40.9	99.5		37.3	44.2

Notes:
1) Samples 20091211SP-011V0-1UN and 20091211SP-015V0-1UN were reanalyzed for TCLP mercury. Both results are shown.
CNF - Contains No Free Liquid

Table 4 - Phase III Waste Characterization Results
West Riser Tide Gate Sediment Removal Action
Wood-Ridge and Carlstadt, New Jersey

Compound	RCRA Limit	Units	20091223SP-019V0-1UN		20091223SP-020V0-1UN		20091223SP-021V0-1UN		20091223SP-022V0-1UN		
Metals			Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	
Mercury (TCLP)	0.2	mg/L	0.57	0.02	0.14	0.02	0.000093	B	0.0002	1.4	0.04
Mercury (Total)		mg/kg	145	4.6	139	4.4	172		4.2	119	4.5
Inorganics											
Total Residue as Percent Solids		%	71.5		74.5		78.5		73.2		

Compound	RCRA Limit	Units	20091223SP-023V0-1UN		20091223SP-024V0-1UN		20091223SP-025V0-1UN		20091223SP-026V0-1UN		
Metals			Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	
Mercury (TCLP)	0.2	mg/L	0.018	0.001	0.011	0.0004	0.00010	B	0.00020	0.00021	0.00020
Mercury (Total)		mg/kg	305	22.6	228	8.7	139		4.2	128	4.3
Inorganics											
Total Residue as Percent Solids		%	73		76.1		79.1		77.6		

Table 5 - Excavated Sediment Disposal as of January 1, 2010
West Riser Tide Gate Sediment Removal Action
Wood-Ridge and Carlstadt, New Jersey

Waste Stream ¹	Manifest Number ²	Date Shipped	Quantity (tons)	Disposal Facility ³	Shipping Document Number
Non-Hazardous Mercury Impacted Soil	WRTG-0001	12/16/09	16.43	Greentree	None
Non-Hazardous Mercury Impacted Soil	WRTG-0002	12/16/09	18.38	Greentree	None
Non-Hazardous Mercury Impacted Soil	WRTG-0003	12/16/09	15.94	Greentree	None
Non-Hazardous Mercury Impacted Soil	WRTG-0004	12/16/09	14.38	Greentree	None
Non-Hazardous Mercury Impacted Soil	WRTG-0005	12/16/09	16.65	Greentree	199658
Non-Hazardous Mercury Impacted Soil	WRTG-0006	12/16/09	16.19	Greentree	None
Non-Hazardous Mercury Impacted Soil	WRTG-0007	12/16/09	15.68	Greentree	None
Non-Hazardous Mercury Impacted Soil	WRTG-0008	12/16/09	20.19	Greentree	254053
Non-Hazardous Mercury Impacted Soil	WRTG-0009	12/16/09	15.95	Greentree	None
Non-Hazardous Mercury Impacted Soil	WRTG-0010	12/16/09	16.50	Greentree	254057
Non-Hazardous Mercury Impacted Soil	WRTG-0011	12/16/09	18.37	Greentree	254054
Non-Hazardous Mercury Impacted Soil	WRTG-0012	12/16/09	16.67	Greentree	254055
Non-Hazardous Mercury Impacted Soil	WRTG-0013	12/16/09	17.16	Greentree	254056
Non-Hazardous Mercury Impacted Soil	WRTG-0014	12/16/09	21.80	Greentree	ZZ00224381
Non-Hazardous Mercury Impacted Soil	WRTG-0015	12/17/09	25.77	Greentree	ZZ00224274
Non-Hazardous Mercury Impacted Soil	WRTG-0016	12/17/09	24.81	Greentree	ZZ00224275
Non-Hazardous Mercury Impacted Soil	WRTG-0017	12/17/09	22.81	Greentree	ZZ00224276
Non-Hazardous Mercury Impacted Soil	WRTG-0018	12/17/09	25.26	Greentree	ZZ00224279
Non-Hazardous Mercury Impacted Soil	WRTG-0019	12/17/09	25.53	Greentree	ZZ00224280
Non-Hazardous Mercury Impacted Soil	WRTG-0020	12/17/09	26.08	Greentree	ZZ00224281
Non-Hazardous Mercury Impacted Soil	WRTG-0021	12/17/09	25.57	Greentree	ZZ00224282
Non-Hazardous Mercury Impacted Soil	WRTG-0023	12/17/09	22.86	Greentree	ZZ00224284
Non-Hazardous Mercury Impacted Soil	WRTG-0024	12/17/09	24.01	Greentree	ZZ00224285
Non-Hazardous Mercury Impacted Soil	WRTG-0025	12/17/09	23.38	Greentree	ZZ00224286
Non-Hazardous Mercury Impacted Soil	WRTG-0026	12/17/09	22.51	Greentree	ZZ00224287
Non-Hazardous Mercury Impacted Soil	WRTG-0027	12/17/09	23.56	Greentree	ZZ00224288
Non-Hazardous Mercury Impacted Soil	WRTG-0028	12/17/09	23.65	Greentree	ZZ00224289
Non-Hazardous Mercury Impacted Soil	WRTG-0029	12/17/09	21.40	Greentree	ZZ00224290
Non-Hazardous Mercury Impacted Soil	WRTG-0030	12/18/09	23.74	Greentree	ZZ00224291
Non-Hazardous Mercury Impacted Soil	WRTG-0031	12/18/09	26.97	Greentree	ZZ00224292
Non-Hazardous Mercury Impacted Soil	WRTG-0032	12/18/09	22.68	Greentree	ZZ00224293
Non-Hazardous Mercury Impacted Soil	WRTG-0033	12/18/09	23.78	Greentree	ZZ00224294
Non-Hazardous Mercury Impacted Soil	WRTG-0034	12/18/09	22.57	Greentree	ZZ00224295
Non-Hazardous Mercury Impacted Soil	WRTG-0035	12/18/09	23.84	Greentree	ZZ00224296
Non-Hazardous Mercury Impacted Soil	WRTG-0036	12/18/09	20.66	Greentree	ZZ00224297
Non-Hazardous Mercury Impacted Soil	WRTG-0037	12/18/09	23.50	Greentree	ZZ00224298
Non-Hazardous Mercury Impacted Soil	WRTG-0038	12/18/09	29.89	Greentree	ZZ00224299
Non-Hazardous Mercury Impacted Soil	WRTG-0039	12/18/09	26.41	Greentree	ZZ00224300
Non-Hazardous Mercury Impacted Soil	WRTG-0040	12/18/09	26.84	Greentree	ZZ00224301
Non-Hazardous Mercury Impacted Soil	WRTG-0041	12/18/09	22.02	Greentree	ZZ00224302
Non-Hazardous Mercury Impacted Soil	WRTG-0042	12/18/09	18.62	Greentree	ZZ00224303
Non-Hazardous Mercury Impacted Soil	WRTG-0043	12/18/09	22.51	Greentree	ZZ00224304
Non-Hazardous Mercury Impacted Soil	WRTG-0044	12/21/09	22.44	Greentree	ZZ00224305
Non-Hazardous Mercury Impacted Soil	WRTG-0045	12/21/09	22.92	Greentree	ZZ00224306
Non-Hazardous Mercury Impacted Soil	WRTG-0046	12/21/09	25.90	Greentree	ZZ00224307
Non-Hazardous Mercury Impacted Soil	WRTG-0047	12/21/09	25.18	Greentree	ZZ00224308
Non-Hazardous Mercury Impacted Soil	WRTG-0048	12/21/09	25.55	Greentree	ZZ00224309
Non-Hazardous Mercury Impacted Soil	WRTG-0049	12/21/09	23.88	Greentree	ZZ00224310
Non-Hazardous Mercury Impacted Soil	WRTG-0050	12/21/09	26.01	Greentree	ZZ00224311
Non-Hazardous Mercury Impacted Soil	WRTG-0051	12/21/09	25.47	Greentree	ZZ00224312
Non-Hazardous Mercury Impacted Soil	WRTG-0052	12/21/09	22.48	Greentree	ZZ00224313
Non-Hazardous Mercury Impacted Soil	WRTG-0053	12/21/09	25.84	Greentree	ZZ00224314
Non-Hazardous Mercury Impacted Soil	WRTG-0054	12/21/09	22.06	Greentree	ZZ00224315
Non-Hazardous Mercury Impacted Soil	WRTG-0055	12/21/09	25.17	Greentree	ZZ00224316
Non-Hazardous Mercury Impacted Soil	WRTG-0056	12/21/09	21.31	Greentree	ZZ00224317

Table 5 - Excavated Sediment Disposal as of January 1, 2010
West Riser Tide Gate Sediment Removal Action
Wood-Ridge and Carlstadt, New Jersey

Waste Stream ¹	Manifest Number ²	Date Shipped	Quantity (tons)	Disposal Facility ³	Shipping Document Number
Non-Hazardous Mercury Impacted Soil	WRTG-0057	12/21/09	22.08	Greentree	ZZ00224318
Non-Hazardous Mercury Impacted Soil	WRTG-0058	12/21/09	26.17	Greentree	ZZ00224319
Non-Hazardous Mercury Impacted Soil	WRTG-0059	12/21/09	25.09	Greentree	ZZ00224320
Non-Hazardous Mercury Impacted Soil	WRTG-0060	12/21/09	25.87	Greentree	ZZ00224321
Non-Hazardous Mercury Impacted Soil	WRTG-0061	12/21/09	23.51	Greentree	ZZ00224322
Non-Hazardous Mercury Impacted Soil	WRTG-0062	12/21/09	22.49	Greentree	ZZ00224323
Non-Hazardous Mercury Impacted Soil	WRTG-0063	12/21/09	24.84	Greentree	ZZ00224324
Non-Hazardous Mercury Impacted Soil	WRTG-0064	12/21/09	21.63	Greentree	ZZ00224325
Non-Hazardous Mercury Impacted Soil	WRTG-0065	12/21/09	21.33	Greentree	ZZ00224326
Non-Hazardous Mercury Impacted Soil	WRTG-0066	12/21/09	23.78	Greentree	ZZ00224328
Non-Hazardous Mercury Impacted Soil	WRTG-0067	12/21/09	25.30	Greentree	ZZ00224329
Non-Hazardous Mercury Impacted Soil	WRTG-0068	12/22/09	24.06	Greentree	ZZ00224330
Non-Hazardous Mercury Impacted Soil	WRTG-0069	12/22/09	19.38	Greentree	ZZ00224331
Non-Hazardous Mercury Impacted Soil	WRTG-0070	12/22/09	24.17	Greentree	ZZ00224332
Non-Hazardous Mercury Impacted Soil	WRTG-0071	12/22/09	22.38	Greentree	ZZ00224333
Non-Hazardous Mercury Impacted Soil	WRTG-0072	12/22/09	22.06	Greentree	ZZ00224334
Non-Hazardous Mercury Impacted Soil	WRTG-0073	12/22/09	24.89	Greentree	ZZ00224335
Non-Hazardous Mercury Impacted Soil	WRTG-0074	12/22/09	23.80	Greentree	ZZ00224336
Non-Hazardous Mercury Impacted Soil	WRTG-0075	12/22/09	23.82	Greentree	ZZ00224337
Non-Hazardous Mercury Impacted Soil	WRTG-0076	12/22/09	22.12	Greentree	ZZ00224338
Non-Hazardous Mercury Impacted Soil	WRTG-0077	12/22/09	25.93	Greentree	ZZ00224339
Non-Hazardous Mercury Impacted Soil	WRTG-0078	12/22/09	24.00	Greentree	ZZ00224340
Non-Hazardous Mercury Impacted Soil	WRTG-0079	12/22/09	23.61	Greentree	ZZ00224341
Non-Hazardous Mercury Impacted Soil	WRTG-0080	12/22/09	26.40	Greentree	ZZ00224342
Non-Hazardous Mercury Impacted Soil	WRTG-0081	12/22/09	23.40	Greentree	ZZ00224343
Non-Hazardous Mercury Impacted Soil	WRTG-0082	12/22/09	23.90	Greentree	ZZ00224344
Non-Hazardous Mercury Impacted Soil	WRTG-0083	12/22/09	22.98	Greentree	ZZ00224345
Non-Hazardous Mercury Impacted Soil	WRTG-0084	12/22/09	24.68	Greentree	ZZ00224346
Non-Hazardous Mercury Impacted Soil	WRTG-0085	12/22/09	20.23	Greentree	ZZ00224347
Non-Hazardous Mercury Impacted Soil	WRTG-0086	12/22/09	27.91	Greentree	ZZ00224348
Non-Hazardous Mercury Impacted Soil	WRTG-0087	12/22/09	25.07	Greentree	ZZ00224349
Non-Hazardous Mercury Impacted Soil	WRTG-0088	12/23/09	29.41	Greentree	ZZ00224350
Non-Hazardous Mercury Impacted Soil	WRTG-0089	12/23/09	31.21	Greentree	ZZ00224351
Non-Hazardous Mercury Impacted Soil	WRTG-0090	12/23/09	30.46	Greentree	ZZ00224352
Non-Hazardous Mercury Impacted Soil	WRTG-0091	12/23/09	24.81	Greentree	ZZ00224353
Non-Hazardous Mercury Impacted Soil	WRTG-0092	12/23/09	24.70	Greentree	ZZ00224354
Non-Hazardous Mercury Impacted Soil	WRTG-0093	12/23/09	19.89	Greentree	ZZ00224355
Non-Hazardous Mercury Impacted Soil	WRTG-0094	12/23/09	27.10	Greentree	ZZ00224356
Non-Hazardous Mercury Impacted Soil	WRTG-0095	12/23/09	23.86	Greentree	ZZ00224357
Non-Hazardous Mercury Impacted Soil	WRTG-0096	12/23/09	23.29	Greentree	ZZ00224358
Non-Hazardous Mercury Impacted Soil	WRTG-0097	12/23/09	21.81	Greentree	ZZ00224359
Non-Hazardous Mercury Impacted Soil	WRTG-0098	12/23/09	22.46	Greentree	ZZ00224360
Non-Hazardous Mercury Impacted Soil	WRTG-0099	12/23/09	22.23	Greentree	ZZ00224361
Non-Hazardous Mercury Impacted Soil	WRTG-0100	12/23/09	24.97	Greentree	ZZ00224362
Non-Hazardous Mercury Impacted Soil	WRTG-0101	12/23/09	18.86	Greentree	ZZ00224363
Non-Hazardous Mercury Impacted Soil	WRTG-0102	12/23/09	23.84	Greentree	ZZ00224364
Non-Hazardous Mercury Impacted Soil	WRTG-0103	12/23/09	22.96	Greentree	ZZ00224365
Non-Hazardous Mercury Impacted Soil	WRTG-0104	12/28/09	20.82	Greentree	ZZ00224366
Non-Hazardous Mercury Impacted Soil	WRTG-0105	12/28/09	19.38	Greentree	ZZ00224367
Non-Hazardous Mercury Impacted Soil	WRTG-0106	12/28/09	26.89	Greentree	ZZ00224368
Non-Hazardous Mercury Impacted Soil	WRTG-0107	12/28/09	23.18	Greentree	ZZ00224369
Non-Hazardous Mercury Impacted Soil	WRTG-0108	12/28/09	25.37	Greentree	ZZ00224370
Non-Hazardous Mercury Impacted Soil	WRTG-0109	12/28/09	20.34	Greentree	ZZ00224371
Non-Hazardous Mercury Impacted Soil	WRTG-0110	12/28/09	20.94	Greentree	ZZ00224372
Non-Hazardous Mercury Impacted Soil	WRTG-0111	12/28/09	22.05	Greentree	ZZ00224373

Table 5 - Excavated Sediment Disposal as of January 1, 2010
West Riser Tide Gate Sediment Removal Action
Wood-Ridge and Carlstadt, New Jersey

Waste Stream ¹	Manifest Number ²	Date Shipped	Quantity (tons)	Disposal Facility ³	Shipping Document Number
Non-Hazardous Mercury Impacted Soil	WRTG-0112	12/28/09	23.38	Greentree	ZZ00224374
Non-Hazardous Mercury Impacted Soil	WRTG-0113	12/28/09	24.65	Greentree	ZZ00224375
Non-Hazardous Mercury Impacted Soil	WRTG-0114	12/28/09	19.47	Greentree	ZZ00224376
Non-Hazardous Mercury Impacted Soil	WRTG-0115	12/28/09	20.92	Greentree	ZZ00224377
Non-Hazardous Mercury Impacted Soil	WRTG-0116	12/28/09	18.26	Greentree	ZZ00224378
Non-Hazardous Mercury Impacted Soil	WRTG-0117	12/28/09	19.67	Greentree	ZZ00224379
Non-Hazardous Mercury Impacted Soil	WRTG-0118	12/28/09	20.93	Greentree	ZZ00224380
Non-Hazardous Mercury Impacted Soil	WRTG-0119	12/28/09	20.14	Greentree	ZZ00224384
Non-Hazardous Mercury Impacted Soil	WRTG-0120	12/28/09	21.39	Greentree	ZZ00224385
Non-Hazardous Mercury Impacted Soil	WRTG-0121	12/28/09	23.28	Greentree	ZZ00224386
Non-Hazardous Mercury Impacted Soil	WRTG-0122	12/28/09	21.87	Greentree	ZZ00224387
Non-Hazardous Mercury Impacted Soil	WRTG-0123	12/28/09	22.87	Greentree	ZZ00224388
Non-Hazardous Mercury Impacted Soil	WRTG-0124	12/28/09	20.19	Greentree	ZZ00224389
Non-Hazardous Mercury Impacted Soil	WRTG-0125	12/29/09	19.48	Greentree	ZZ00224390
Non-Hazardous Mercury Impacted Soil	WRTG-0126	12/29/09	18.63	Greentree	ZZ00224391
Non-Hazardous Mercury Impacted Soil	WRTG-0127	12/29/09	26.72	Greentree	ZZ00224392
Non-Hazardous Mercury Impacted Soil	WRTG-0128	12/29/09	24.20	Greentree	ZZ00224393
Non-Hazardous Mercury Impacted Soil	WRTG-0129	12/29/09	22.76	Greentree	ZZ00224397
Non-Hazardous Mercury Impacted Soil	WRTG-0130	12/29/09	25.09	Greentree	ZZ00224398
Non-Hazardous Mercury Impacted Soil	WRTG-0131	12/29/09	22.06	Greentree	ZZ00224399
Non-Hazardous Mercury Impacted Soil	WRTG-0132	12/29/09	24.61	Greentree	ZZ00224400
Non-Hazardous Mercury Impacted Soil	WRTG-0133	12/29/09	24.90	Greentree	ZZ00224401
Non-Hazardous Mercury Impacted Soil	WRTG-0134	12/29/09	25.88	Greentree	ZZ00224402
Non-Hazardous Mercury Impacted Soil	WRTG-0135	12/29/09	19.38	Greentree	ZZ00224403
Non-Hazardous Mercury Impacted Soil	WRTG-0136	12/29/09	19.56	Greentree	ZZ00224404
Non-Hazardous Mercury Impacted Soil	WRTG-0137	12/29/09	20.45	Greentree	ZZ00224405
Non-Hazardous Mercury Impacted Soil	WRTG-0138	12/29/09	27.54	Greentree	ZZ00224406
Non-Hazardous Mercury Impacted Soil	WRTG-0139	12/29/09	24.85	Greentree	ZZ00224407
Non-Hazardous Mercury Impacted Soil	WRTG-0140	12/29/09	28.95	Greentree	ZZ00224408
Non-Hazardous Mercury Impacted Soil	WRTG-0141	12/29/09	20.73	Greentree	ZZ00224409
Non-Hazardous Mercury Impacted Soil	WRTG-0142	12/29/09	22.52	Greentree	ZZ00224410
Non-Hazardous Mercury Impacted Soil	WRTG-0143	12/30/09	23.37	Greentree	ZZ00224411
Non-Hazardous Mercury Impacted Soil	WRTG-0144	12/30/09	21.03	Greentree	ZZ00224412
Non-Hazardous Mercury Impacted Soil	WRTG-0145	12/30/09	27.56	Greentree	ZZ00224413
Non-Hazardous Mercury Impacted Soil	WRTG-0146	12/30/09	25.65	Greentree	ZZ00224414
Non-Hazardous Mercury Impacted Soil	WRTG-0147	12/30/09	23.27	Greentree	ZZ00224415
Non-Hazardous Mercury Impacted Soil	WRTG-0148	12/30/09	21.36	Greentree	ZZ00224416
Non-Hazardous Mercury Impacted Soil	WRTG-0149	12/30/09	23.63	Greentree	ZZ00224417
Non-Hazardous Mercury Impacted Soil	WRTG-0150	12/30/09	24.94	Greentree	ZZ00224418
Non-Hazardous Mercury Impacted Soil	WRTG-0151	12/30/09	19.91	Greentree	ZZ00224419
Non-Hazardous Mercury Impacted Soil	WRTG-0152	12/30/09	23.71	Greentree	ZZ00224420
Non-Hazardous Mercury Impacted Soil	WRTG-0153	12/30/09	24.67	Greentree	ZZ00224421
Non-Hazardous Mercury Impacted Soil	WRTG-0154	12/30/09	23.00	Greentree	ZZ00224422
Non-Hazardous Mercury Impacted Soil	WRTG-0155	12/30/09	23.12	Greentree	ZZ00224423
Non-Hazardous Mercury Impacted Soil	WRTG-0156	12/30/09	25.77	Greentree	ZZ00224424
Non-Hazardous Mercury Impacted Soil	WRTG-0157	12/30/09	24.12	Greentree	ZZ00224425
Non-Hazardous Mercury Impacted Soil	WRTG-0158	12/30/09	23.24	Greentree	ZZ00224426
Non-Hazardous Mercury Impacted Soil	WRTG-0159	12/30/09	22.35	Greentree	ZZ00224427
Non-Hazardous Mercury Impacted Soil	WRTG-0160	12/30/09	23.55	Greentree	ZZ00224428

Notes:















¹ Soil sent for offsite disposal was classified as non-hazardous pursuant to 40 CFR 261 except where noted

² A manifest was assigned to all soil disposal shipments, including non-hazardous soils. Manifest tracking was performed by Veolia Environmental Services.

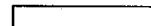
³ Greentree Landfill located in Kersey, Pennsylvania, operated by Veolia Environmental Services.

Attachment 1 – Schedule of West Riser SRAWP Activities

**West Riser Tide Gate Sediment Removal Project
Wood-Ridge, NJ**

ID		Task Name	Duration	Start	Finish	Aug '09	Sep '09	Oct '09	Nov '09	Dec '09	Jan '10	Feb '10	Mar '10	Apr '10	May '10	Jun '10	Jul	
1		SES Pre-Construction Submittals	34 days	Mon 8/10/09	Thu 9/24/09	2	9	16	23	30	6	13	20	27	4	11	18	25
2		Mobilization and Site Preparation	15 days	Mon 8/31/09	Fri 9/18/09													
3		Install Cofferdams	21 days	Tue 9/8/09	Tue 10/6/09													
4		Install By-Pass Pumping and Dewatering Systems	19 days	Tue 9/8/09	Fri 10/2/09													
5		Operate Bypass Pumping System	17 days	Mon 9/28/09	Tue 10/20/09													
6		Excavate Sediment/ Backfill	18 days	Wed 9/30/09	Fri 10/23/09													
7		Temporary Restoration (Topsoil, Seed, Erosion Control)	3 days	Tue 10/20/09	Thu 10/22/09													
8		Remove Cofferdams/ Bypass System	8 days	Wed 10/21/09	Fri 10/30/09													
9		Decon and Demob Equipment	9 days	Thu 10/29/09	Tue 11/10/09													
10		Soil Loadout for Disposal (Non-Hazardous)	20 days	Wed 12/16/09	Tue 1/12/10													
11		Soil Loadout for Disposal (Hazardous)	2 days	Wed 1/13/10	Thu 1/14/10													
12		NJMC Installs New Tide Gate (Start Date TBD)	30 days	Mon 3/1/10	Fri 4/9/10													
13		Site Restoration (Start Date TBD)	60 days	Mon 4/12/10	Fri 7/2/10													

Task



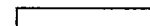
Progress



Summary



External Tasks



Deadline



Split



Milestone



Project Summary



External Milestone

